

EFFECT OF WEB DESIGN ON THE OVERALL SUCCESS OF WEB SITES

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CHAPTER I: Introduction

With the ongoing increase in web development and online activity, more companies find themselves faced with the decision of positioning merchandise and services on the Internet. Although this may seem like a simple enough decision, companies have several conditions to consider such as what features to include in their sites, design objectives, and ultimately whether their decision will produce any added value or profit for the company. In order to better understand this study it is crucial to become familiar with some of the terms that will be used. Web 2.0 refers to features and tools that allow for added collaboration and interactivity by the visitors of a particular web site. This study measured success rate by analyzing a web site's *viewer traffic*, *time on page*, *bounce rate*, and *potential product sales*. *Viewer traffic* is the number of visitors that a site receives on a given day. *Time on page* shows the elapsed time a person spent viewing a particular web page while *bounce rate* represents the percentage of initial visitors who leave the site after viewing the first page of the site. This study can be used to assist a company's decision-making process by asking the question: What is the relationship between a web site's aesthetic design and use of web 2.0 features to its overall success rate?

Through knowledge gained of the graphic communication industry this study demonstrates a direct correlation between aesthetic design and the success rate of a web site. With the vast amount of viewable content on the World Wide Web it is easy for an individual to quickly browse past a web site that seems dull and uninteresting. On the other hand, if a site has an appealing design, simple navigation, and useful web 2.0 features, it may keep visitors on the site long enough for them to become interested in the products or services that are being offered. The only situation where this hypothesis may not hold true is in a niche market. In this scenario a customer may only be able to obtain a product or service from one provider. This means that regardless of aesthetic design or ease of navigation, visitors will put forth the extra effort to obtain the desired product.

The purpose of this study was to provide support and reassurance to any company or individual who is seeking to develop an online business. This study was accomplished by developing a test web site and analyzing the views per page, time on page, sales, bounce rate, and other information that proved useful in developing before-and-after statistics of the studied site. With the analysis completed there was enough quantifiable information obtained to effectively compare and contrast the effects of design on a web site. The study also includes information on widely used online features and displays their overall effectiveness. The data for this study was obtained through online resources and *Google Analytics* technology. Company interviews are also included and used as supplemental material to further develop and understand the topic.

With web-development being an expensive investment to maintain, it is critical for a company to know exactly what features it is paying for. This study sheds light on the overall effectiveness of features and design used in web design, ultimately providing a basic guide for web-development.

CHAPTER II: Literature Review

Background on Web Development Tools

Even though the Internet and web design are fairly new to the graphic communication field they have undergone drastic changes since first introduced. Since the start of the first web site, the World Wide Web has been continually evolving and expanding into the everyday lives of individuals. (Aranda)

The first web sites were developed through the use of a mark-up language called hypertext markup language (HTML) and were very basic in structure and functionality. (Aranda) They were primarily used as a method of presenting information and linking pages, as HTML evolved it became more robust and capable of providing more layout options for designers. (Aranda) Even with HTML becoming more capable, a new web language called cascading style sheets, which is referred to as CSS, was developed and since has become a standard for laying out web sites. (Aranda) Before CSS, web sites were structured using the table functions within HTML, that were rigid and posed many design limitations. (Aaron) Using tables to layout a page is very similar to using Microsoft Excel to position graphic elements, where you have a grid of tables and fill them

accordingly to how you would like them to appear. The main advantages of using CSS over HTML is that “CSS allows for much more complex arrangements of page elements, including overlapping content. Furthermore, CSS separates content from structure” and uses style sheets to quickly and efficiently change and update a web site. (Aaron) Even with the overlapping evidence of improvement, there are still designers who choose to use HTML tables to layout their web sites, thus depicting the variety of practices in the web development world. (Aaron)

Along with CSS there are other languages such as Javascript, Extensible Markup Language (XHTML), and Adobe Flash that have created new trends and advances in web design and user interactivity. (Aranda) An example of such is the use of AJAX, which basically stands for Javascript and XML. It is one of the most recent developments and allows for the dynamic communication with back-end servers. (Aaron) A great example of an AJAX based feature is Google Suggest, where visitors of the page begin to type a few letters and within seconds a short list of words that begin with those letters is displayed in a drop down list. (Aaron) With the use of these tools making the current trends possible, there has been a push towards “Web 2.0 functionality, user contributed content, blogs, and online video.” (Web sites: Ask the experts)

Effect of Design on Consumer Response

With the Internet increasing the likelihood that shoppers will encounter the retail web sites of companies with which they are unfamiliar... the only information available for consumers to develop these assumptions is the semiotic factors inherent in the design of the site. It is essential for companies who do not have a strong market presence or who are migrating to new markets to design their sites to promote impressions of product and service quality independent of previous consumer experience. (Resnick)

The study done by Resnick showed that semiotic features, although providing little real information about a company’s actual behavior, influenced both perceptions and site selection. (Resnick) Paul Ballantine and David Fortin also did a study on in-

teractivity and design on the effect of a possible consumer; their results “suggest that a linear relationship exists between the level of interactivity provided by an online store and pleasure. Moreover, pleasure was found to be a significant predictor of the likelihood that a consumer would purchase products online.” (Ballantine) Although the majority of research showed a typical linear correlation between design and the success of a company’s web site, there are opposing views in the industry.

Issues and Opposing Ideas in the Field

Within the realms of design and web development tools, there are opposing views and issues as to what practices produce the best design and functionality results. Although one may think that creating a site with interactivity and Web 2.0 features is good practice, there are those who think otherwise. In an interview done for *Ask the Experts*, the question of introducing Web 2.0 features was asked. Carton, one interviewee, business owner and web development expert responded, “Sure, blogs are hot, but why do most business-to-business companies need them? Not only are they difficult to maintain, consume a large share of resources and are difficult to pull off in a corporate culture that emphasizes control of information, but most of the time they’re pretty irrelevant to most of the customers who come to the site.” (Web sites: Ask the Experts) Carton continued, stating that many sites are falling short of actually publishing content and are too focused on the extra features to really develop a clear message. (Web sites: Ask the experts)

To further fuel the opposition to Web 2.0 features is the fact that a web designer does not have control over how an individual views their page. Currently there are five major Internet browsers; Microsoft Internet Explorer, Mozilla Firefox, Apple Safari, Opera, and Google Chrome, all of which can be used to access the World Wide Web. The software differences between browsers translate to functionality and viewing differences do to the lack of support for certain web features. For example, a company can decide to include an automatic news feed feature on their web site that updates information automatically when it is changed by the given news provider. This may seem like a nice

and useful feature to include, but if a visitor is using Google Chrome as their browser, that particular feature of the site will not function because of Chrome's lack of support technology. (Aaron) Which posed the question: why pay for something that cannot be accessed by all users?

In the area of design, Mark Daoust, the owner of Site Reference, wrote an article where he explains how it is that many basic and unappealing web sites are succeeding in our online communities. He states that individuals often forget that a large part of society is actually afraid of the Internet. Although online shopping is growing, most people still have concerns about online security and the impersonal nature of the web. Most people do not know how to surf efficiently and use only the default tools that are given to them when they take their computer out of the box. This is one reason that ugly web sites can sell. The lack of professionalism and a polished look leads one to believe that they are dealing with an individual. Web sites cannot be trusted, but individuals can be trusted. (Daoust)

Daoust continued by giving the example of the popular online networking and classified community of Craigslist. Craigslist boasts simplicity, the web site is simple to browse, simple for users to post messages, and simple to use. Because of its simplicity, Craigslist grew. The lesson here is simplicity. A beautiful web site may draw a user in initially, but a simple web site will keep users coming back. If one user gets lost trying to navigate through a web site, purchase an item, or find simple contact information, then that site is unnecessarily increasing the chances that this user will simply leave. (Daoust)

Conclusion

With confusion in the field and opposing views in web design practice, it is important to look further into what works and what doesn't. This study has focused on analyzing the effectiveness of design and increased interactivity on the success of a web site.

CHAPTER III: Research Methods and Procedures

With web sites becoming more elaborate in their design and features, this study has helped determine if the added content holds importance to the customer or simply becomes an extra weight that a business would have to carry.

In order to adequately cover the scope of this study, Elite and Specialized Interviewing, Descriptive Research, and Content Analysis has been used. This has helped prove the hypothesis that there is a direct correlation between aesthetic design and the success rate of a web site. According to Harvey Levenson, Ph.D., in his book *Some Ideas About Doing Research in Graphic Communication*, Elite and Specialized Interviewing “is a process devised by the famous communication theorist, Lewis A. Dexter. The focus of Dexter’s premise is that people who perceive themselves to be important, such as professionals and executives, must be interviewed differently than the ‘average person on the street’ in maximizing the collection of useful information in applied research.” In Elite and Specialized Interviewing, the interview process requires the use of open-ended questions and a conversational style of interviewing to provide the best responses. (Levenson) “Descriptive Research studies are designed to determine the nature of a situation as it exists at the time of the study. The aim is to describe, ‘what exists’ with respect to variables

or conditions in a situation.” (Levenson) With the use of Elite and Specialized Interviewing along with Descriptive Research, Content Analysis was used to quantify the research results and draw a conclusion. (Levenson)

Elite and Specialized Interviewing

Three local companies in the print and imaging market were interviewed and chosen based on their differing methods of presenting their companies and services on the World Wide Web. The companies ranged from one that was very dependent on Web 2.0 features to one that was not. The owner or plant manager of each company was interviewed to provide useful and substantial information. For the company that heavily used Web 2.0 features I chose Coudray Serigraphics, for moderate use Poor Richard's Press, and for light to no use Left Coast Tees. The aim for the interviews was to determine the reasoning behind the different online approaches and look deeper into whether or not they planned to implement or rid themselves of the new web technology.

For the company that used the Web 2.0 features, I asked questions that pertained to the cost of maintaining and updating the features that they have in place. With the knowledge and experience that they have acquired through the use of such web features, I also wanted to know their opinion on the level of difficulty for a new company to implement. Have the companies always offered these features from the beginning of their online experience, if not, how has the inclusion of such features affected their overall return and customer experience? Has the company encountered any problems or issues with the online services that they offer? What are the customer demographics for their particular company, such as young adult or other businesses?

For the company that did not have Web 2.0 features, I asked questions that centered around customer service and experience. Did their customers ever request any online services that were currently not offered by their web site? If not through online features and enhanced web experience did they have other methods of differentiation. What are their views on including Web 2.0 features. Also I wanted to understand their

customer demographics to see if this had affected their reasoning behind Web 2.0 implementation.

Content Analysis for Elite and Specialized Interviewing

After completing the interviews I quantified and analyzed the interview results by separating the responses into categories such as: comments that were Web 2.0 positive and attributed a value of (+1) while the Web 2.0 negative comments received a value of (-1). A company can give comments that are both positive and negative in Web 2.0 outlook, therefore they can receive more than one (+1) or (-1) per individual question. Once the chart was completed I added each company's points and divided them by the amount of comments that were made. The larger the resulting number the more that particular company favored Web 2.0 features. Once the information was categorized I displayed the data in small tables separated by question and company.

Sample Table

	COMPANY 1	COMPANY 2	COMPANY 3
QUESTION 1	+1	+1	-1 -1 +1
QUESTION 2	+1 +1	-1 +1 +1	-1

Descriptive Research Method

The problem for this study centered around identifying whether a web site's aesthetic design had a positive or negative effect on the company that is portrayed. The research was setup through the use of a pre-existing web site for the San Luis Obispo Vocal Arts Ensemble. Maintaining the already established background, goals, and products

offered, I then developed two aesthetically different web sites that displayed and offered the same information. Web site (A) was be the current site that possessed a basic design, navigational properties, and no other interactive features. Web site (B) contained extra features and material such a WordPress Blog, Twitter feed, Javascript enabled calendar, more engaging graphics, a secondary navigation, and fully optimized and searchable content.

Once the two web sites were developed, I created a scenario where individuals, men and women between the ages of 18-25, interacted with the site and then took part in a short four-question survey (refer to sample survey below). The survey pool consisted of a minimum of 23 survey respondents for each of the two sites and the population primarily composed of Cal Poly students. The individuals who took the survey were not required to spend a certain amount of time on the site and were simply instructed to view the page and then take the survey. These individuals only viewed one of the sites, chosen at random.

Along with the information gathered from the surveys, *Google Analytics* technology was embedded in the structure of both sites to monitor the visitors' interaction with the sites. The information obtained from the *Google Analytics* provided material that is not expressed in the survey. For example, the data showed how long visitors actually spent on any given page or area of the sites.

Sample Survey 1

LEGEND

1. Not At All 2. Not Very 3. Moderately 4. Very 5. Extremely
--

1. Would you feel secure ordering a product or purchasing a ticket from this site?

① ② ③ ④ ⑤

2. Was the overall design of the web site appealing and engaging?

① ② ③ ④ ⑤

3. How easy is it to navigate around the site?

- ① ② ③ ④ ⑤

4. Did the web site provide sufficient information regarding the San Luis Vocal Arts Ensemble?

- ① ② ③ ④ ⑤

Content Analysis for Descriptive Research

The information gathered from the survey was displayed in a table that compares the side-by-side results for the two sites. With the data collected and the tables graphed I included a description of the results pertaining to each table. For example, there is a table that demonstrates the results to the question regarding safe purchasing with a paragraph below it saying something such as, this table demonstrates that respondents to web site (B) appeared to feel more comfortable about possibly making a purchase. The same method of analysis was applied to the data collected from the *Google Analytics* software. Along with the tables displaying the results from the data collected I attributed a point system to each of the individual tables that were used to create a graph of the two web sites, the more points the web site had the more successful it was.

CHAPTER IV: Results

(A sample of the interview questions can be found in Appendix 1)

Interview with Mark Coudray of Coudray Serigraphics

From the start of the interview, Mark showed a very strong knowledge of the technology that he has implemented in his company's web site. Coudray Serigraphics has included video, Twitter, live video feed of their operations, WordPress technology, and a client collaboration medium all of which have helped to create the transparent company that Mark has been striving for. Throughout the interview, Mark kept using this phrase of a "transparent company," meaning that a company doesn't hide its method of operation from its customers but instead includes them in it. Mark stated that the main reason for implementing these features and technology was to develop and establish an emotional connection between his business and its customers. He states that when you interact with your clients on an emotional level, a company moves from simply being a provider of services and assumes the role of protector. They are taken under the care and protection of the company that they highly believe in and respect. It then becomes the company's

responsibility to look after the well being of its clients and their companies.

When asked if he had encountered any problems or difficulties while implementing this technology, he said that he has not because it is all in a company's overall strategy. If they market themselves correctly they should not have any problems getting their return on investment. He also said that when a company is operating on this level of transparency with its customers, they are able to see returns that are three to five times greater than they normally would. Overall, Mark had nothing but positive things to say about Web 2.0 technology and ended our interview by saying that there are many stereotypes for the use of Web 2.0 and that most companies at this time don't really understand how to use these tools.

Interview with Doug Speer from Poor Richard's Press

When asking the first question of how long Poor Richard's Press has had their current web site, Doug answered by saying that they originally had a more extensive web site that was more visually appealing and robust. He continued by stating that they went away from that original model because it was too expensive to maintain and opted for a pre-designed web site for printers that is basically rented. Their reasoning behind originally wanting to add the web 2.0 technology was do to a request made by one of their largest clients. After investing over 100,000 dollars on the development of a management system and online ordering capabilities, they realized that they were not going to be able to keep up with the client's changing demands and ended up going to the web site for printers.

Although the web site that Doug currently has in place is not like their old one, it offers many valuable web 2.0 features at a reasonable management cost. The web site has instructional audio, online ordering capabilities, and a customer account management system. Doug is happy with Poor Richard's current web site and feels that their return on investment is more than adequate. He states that if they did not have this type of a web site they would not receive some of the orders that they do. Although Doug is currently content with his current situation, he said that he has experienced several difficulties cen-

tering around coding, updating and lack of integration with their management system.

His message for upcoming companies looking to implement web 2.0 technology is that you cannot grow your company with it but without it you will most likely fail. Other companies are trying to make their customers' lives easier and if you don't do the same you will fall behind in your market.

Interview with David Whitaker of Left Coast Tees

Beginning the interview with David, I opened with the similar question regarding the status of their current site. After this question I had to change each one of the remaining questions so that they would pertain to Left Coast Tees. David said that they have had their current site for a long time and the newest addition to the site has been their product catalog, which displays every one of their printable garments. David stated that they have been considering updating their site and making it more content-rich. They have attempted to develop a Facebook account but have not been able to maintain it accordingly. David worries about this and feels that his potential investment may suffer the same fate.

Although David understands the value of developing a communication bond between Left Coast Tees and its clients, he is skeptical about the implementation. Since the majority of his clients are local and come from the Cal Poly Greek System, he does not receive too many requests from customers. If anything, online ordering is one of those requests.

Table 1: Interview Response/ Web 2.0 Positive or Negative

	Coudray Serigraphics	Poor Richard's Press	Left Coast Tees
QUESTION 1	+1	+1	-1
QUESTION 2	+1	-1 +1	+1 +1
QUESTION 3	+1 +1	+1	+1 +1
QUESTION 4	+1	-1 -1	-1
QUESTION 5	+1	+1	-1
QUESTION 6	+1 +1	+1 +1 -1 -1	+1 -1
	TOTAL= 1	TOTAL= .09	TOTAL=.11

Table 1 Results

The results shown on the table above clearly show that Coudray Serigraphics showed a very strong disposition towards the use and implementation of web 2.0 technology. On the other hand, Poor Richard's Press and Left Coast Tees both had good and bad things to say about the subject of web 2.0. The table shows Left Coast Tees also having a stronger view on the subject when compared to Poor Richard's Press. This could be attributed to the fact that they have not yet fully entered that sector of the market and hold an optimistic view. On the other hand, Poor Richard's Press has been in the web 2.0 market and have experienced their share of difficulties and struggles with the technology thus giving us their current disposition.

San Luis Obispo Vocal Arts Ensemble Google Analytics Results

The results acquired from the *Google Analytics* technology are representative of three of the main pages for the San Luis Vocal Arts Ensemble web site. The three pages that were observed were the Index.html page or home page, the contact page, and the about us page. The information gathered is displayed in the following tables with Web Site (A) symbolizing the pre-existing Vocal Arts Ensemble site and Web Site (B) depicting the data from the modified web site. The data that is being depicted throughout Tables 1-3 is from a four day observation period.

Table 2: Home page

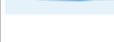
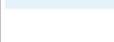
WEB SITE (A)	WEB SITE (B)
 93 Pageviews	 71 Pageviews
 74 Unique Views	 39 Unique Views
 00:00:28 Time on Page	 00:00:44 Time on Page
 49.02% Bounce Rate	 0.00% Bounce Rate
 47.31% % Exit	 21.13% % Exit
 \$0.00 \$ Index	 \$0.00 \$ Index

Table 2 Results

The table above shows the results from the home page of both web site (A) and (B). The first two items on the table are the pageviews and unique page views, which show the amount of traffic that both web sites received within the four day period of observation. The data clearly demonstrates that the pre-existing web site received more views in the time that it was observed. Even so, the web site (A) has a lower unique view over page-views ratio. This means that individuals visited the home page of web site (A) and never returned, on the other hand there is almost a 2 to 1 ratio for web site (B). This means that after visiting one or more of the site's pages the visitor returned back to the home page of web site (B).

The following item is very clear in definition, the time on page indicates the amount of time that a visitor spent on that particular page of the site. Table 2 clearly shows that web site (B) had a higher on average time on page than web site (A). This can be attributed to a number of reasons unable to be clearly proven by this study.

Bounce rate is the next field on the table and is more difficult to understand than the other items. The bounce rate indicates the number of people who left the site after only visiting this particular page. Table 2 shows that from the individuals visiting web site (A), 49.02 percent of them ended up leaving the web site only having viewed this page. On the other hand web site (B) had a bounce rate of zero percent meaning that none of the individuals that visited the site left without viewing another page. The zero percent bounce rate of web site (B) is very rare and could be attributed to the limited four day window of data observation. Nonetheless, this information is very helpful in further understanding this study.

The last item of importance within Table 2 is the exit rate, which depicts the percentage of the visitors who left the site through this particular page after visiting more than one page. The data in the table shows that from the visitors who viewed more than one page including the home page of web site (A), 47.31% exited the site through this page. The same field for web site (B) shows a much lower exit rate of 21.13%. The only other item left in the table is \$ index which has to do with the amount of sales generated by the site. Since this study did not sale any particular product, the \$ index will maintain at zero throughout the analysis.

Table 3: About Us page

WEB SITE (A)	WEB SITE (B)
 35 Pageviews	 34 Pageviews
 30 Unique Views	 23 Unique Views
 00:01:27 Time on Page	 00:00:12 Time on Page
 18.75% Bounce Rate	 0.00% Bounce Rate
 25.71% % Exit	 17.65% % Exit
 \$0.00 \$ Index	 \$0.00 \$ Index

Table 3 Results

Analyzing the pageviews of both web site (A) and (B) shows that although they received nearly the same amount of pageviews, web site (B) once again has a higher pageviews to unique views ratio. The time on page difference in the about page of web site (A) and (B) is staggeringly different in Table 3. The visitors of web site (A) spent over six times the amount of time than those of web site (B). Once again this can be attributed to many things, the possibilities of which will be further examined in chapter five of this study. Much like in Table 2, Table 3 shows web site (B) having an amazing bounce rate of 0% while web site (A) falls behind with a bounce rate of 25.71%. The drop in bounce rate from web site (A's) home page to the about page is very understandable as many visitors access the about page through the home page, thus instantly giving the about page a lower bounce rate. The last item of the table shows that once again web site (B) has a lower exit rate than web site (A).

Table 4: Contact page

WEB SITE (A)	WEB SITE (B)
 12 Pageviews	 22 Pageviews
 10 Unique Views	 19 Unique Views
 00:01:47 Time on Page	 00:00:45 Time on Page
 50.00% Bounce Rate	 0.00% Bounce Rate
 33.33% % Exit	 18.18% % Exit
 \$0.00 \$ Index	 \$0.00 \$ Index

Table 4 Results

For the first time in the study, web site (B) shows a greater number of pageviews than web site (A). The remainder of the information is very similar to the trends that are visible in Tables 1 and 2. One of the bigger differences is the high bounce rate for web site (A) so much so that it is higher than the home page of the site. This means that the individuals that enter the site through the contact page typically leave without visiting any of the other pages within the site.

Table 5: Javascript Support

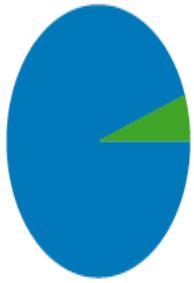
Java Support	Visits	Visits	Visits
 Yes	481	94.50%	
 No	28	5.50%	

Table 5 Results

The data being depicted in Table 5 deals with the issue of accessibility that was discussed in chapter 2 of this study. This is one of the large arguments against web 2.0 implementation. The table demonstrates that of 509 visitors that viewed the Vocal Arts Ensemble web site there were 28 individuals who did not have Javascript support. Although it is only 5.5% of the total traffic, Javascript was heavily used in the development of web site (B) and without Javascript support the site would completely fail to meet the needs of its visitors. The rotating banner that greets visitors on the home page, the twitter feed, the interactive calendar, and even the navigation bar would cease to function.

Table 6: WordPress Blog Visits

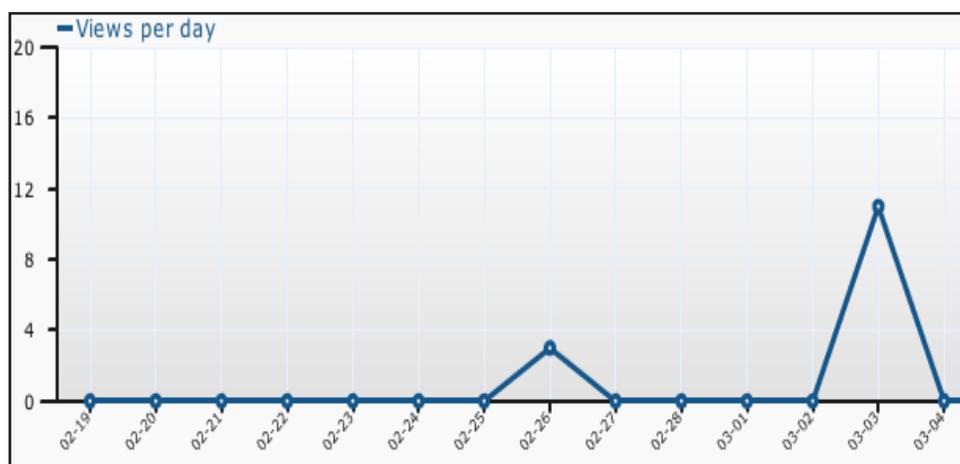


Table 6 Results

Along with the information provided by *Google Analytics*, WordPress was also used to monitor the traffic that came from web site (B). Table 6 shows that during the four day period of observation there were eleven unique visits to the Vocal Arts Ensemble blog. This is very important information to have because it shows that of the thirty-nine total visitors who viewed web site (B) eleven of them were interested in viewing the blog. This is over a fourth of the traffic and is a good indicator of the blog's potential.

Web Site Interactivity Survey Results

Table 7: Web Site (A) Survey Response

1. After visiting the site, how secure would you feel about ordering a product or purchasing a ticket from the web site?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	8.0% (2)	48.0% (12)	40.0% (10)	4.0% (1)	0.0% (0)	2.40	25	
							answered question	25
							skipped question	0

2. Was the overall design of the web site appealing and engaging?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	32.0% (8)	36.0% (9)	24.0% (6)	8.0% (2)	0.0% (0)	2.08	25	
							answered question	25
							skipped question	0

3. How easy is it to navigate through the web site?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	8.0% (2)	16.0% (4)	36.0% (9)	28.0% (7)	12.0% (3)	3.20	25	
							answered question	25
							skipped question	0

4. Did the web site provide sufficient information regarding the San Luis Obispo Vocal Arts Ensemble?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	0.0% (0)	4.0% (1)	48.0% (12)	48.0% (12)	0.0% (0)	3.44	25	
							answered question	25
							skipped question	0

Table 8: Web Site (B) Survey Response

1. After visiting the site, how secure would you feel about ordering a product or purchasing a ticket from the web site?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	0.0% (0)	4.3% (1)	56.5% (13)	39.1% (9)	0.0% (0)	3.35	23	
							answered question	23
							skipped question	0

2. Was the overall design of the web site appealing and engaging?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	0.0% (0)	13.0% (3)	39.1% (9)	34.8% (8)	13.0% (3)	3.48	23	
							answered question	23
							skipped question	0

3. How easy is it to navigate through the web site?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	4.3% (1)	4.3% (1)	17.4% (4)	60.9% (14)	13.0% (3)	3.74	23	
							answered question	23
							skipped question	0

4. Did the web site provide sufficient information regarding the San Luis Obispo Vocal Arts Ensemble?							Create Chart	Download
	Not at all	Not very	Moderately	Very	Extremely	Rating Average	Response Count	
1	0.0% (0)	0.0% (0)	26.1% (6)	56.5% (13)	17.4% (4)	3.91	23	
							answered question	23
							skipped question	0

Table 7 and 8 Comparison Results

By analyzing the side-by-side information provided by the tables, the primary difference in responses are found in questions one and two. The tables show that web site (A) received an average rating of 2.08 in regards to overall aesthetic appeal while web site (B) received a 3.48. In regards to question 1, individuals also felt significantly more secure in potentially making a purchase through web site (B). Another interesting thing that occurred has to do with question number four. Although the content that was provided in both web site (A) and web site (B) was nearly identical, the tables show that individuals felt web site (B) had offered more informative content. This could possibly be attributed to individuals being able to easily find and browse the content in web site (B) through the improved navigation.

CHAPTER V: Conclusion

Overall Success of Web Site (A) and (B)

The *Google Analytics* information shows lower pageviews/unique views ratio, bounce rate and exit rate of visitors viewing web site (B). These are all clear indicators that the visitors of the aesthetically pleasing site have browsed through the a section of the site as opposed to leaving the site after having viewed only a single page. This means that visitor retention has increased from web site (A) to that of web site (B). This increase in visitor retention increases the chances that a visitor may become interested in something within the site and even potentially want to make a purchase. For this particular site and project, the site with the added features and increased visual appeal appears to be the more successful of the two sites.

This information is further supported by the survey results shown in Tables 7 and 8 that depict a direct correlation between design aesthetics and purchasing security. The individuals that felt the web site was visually appealing also felt more secure about potentially making a purchase from the site. The survey information also shows a few individuals that felt very strongly about not feeling secure when purchasing a product from web site (A). This is something that would need to be addressed because it shows that the web

site is not functioning properly and achieving the goals for the company.

Another clear indicator that shows the success of web site (B) over that of (A) is the results provided from question number four of the survey. The question asks whether the site provided sufficient information regarding the Vocal Arts Ensemble, the responses show that web site (B) had overall better content. Since both sites had the same content, this can be attributed to design and navigation allowing visitors to quickly find the information they are looking for. This minimizes confusion and lowers frustration which in turn harbors longer visiting trends.

Implementation of Web 2.0 Features

In regards to the web 2.0 features that were examined throughout this study, it was found that although many of these tools may be difficult to implement and maintain it is something that is crucial for the advancement of most companies.

There are definite benefits and drawbacks to having some of these features, for example; blogs and twitter feeds can be used to provide consistent returning traffic to a site while also functioning as everyday promotional tools. Even so, information gathered from the interviews and the personal experience gained through setting up the Vocal Arts Ensemble Blog show that blog development is a very time intensive process. A blog requires someone to set it up, manage, and eventually post relevant content about the company. This is why a company may first want to position a link titled blog that leads to a landing page with analytics technology in its background. This will give a company a quick measurement of how many of their visitors are interested in a blog. With the analytics information gathered a company can then make an educated decision about the situation.

For other web 2.0 features that may be activated through the use of Javascript or Flash, a company has to decide on what is important to them. The fact is that not everyone who comes to a given site will experience it the way that it was meant to be experienced. Javascript and Flash are two media that have amazing interactive capabilities and should be used by a company whose target market is centered around this. In the case of

the Vocal Arts Ensemble site, only five percent of the total traffic did not have Javascript support. Five percent is a small margin for the functions and features that are available to the remainder of the visitors.

Final Thoughts

Mark Coudray is correct in saying that most companies do not understand how to use web 2.0 and design to their full potential. This is why one of the most important key points to remember is that any company looking to implement such features needs to have a plan of approach and strategy. Just because a neighboring company has a blog or live video feed does not mean that it is right or useful for all other companies to implement. The best thing is having a clear understanding of the purpose and need of the sought after technology.

ENDNOTES

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APPENDIX: Market Survey Interview Questions

Survey Questions for Coudray Serigraphics and Poor Richard's Press

1. Did you always have such a content-rich web site?
2. Why did you end up adding the content that you did?
3. How has the inclusion of such features affected the company returns and its customer service?
4. Have you encountered any problems with the implementation of your web 2.0 features?
5. How difficult is it to maintain and upkeep this technology, does it cost more than it benefits?
6. With all the knowledge and expertise that you have of your industry, would you recommend that a small up and coming business invest in such web development tools?

Survey Questions for Left Coast Tees

1. How long have you had your current web site?
2. Do you have any plans to update or revamp the site, adding things such as blog, twitter, video, online ordering, etc..?
3. Are any services ever requested by your customers?

4. Why is it that you have postponed entering the more feature rich online experience?
5. Aside from working closely with the local fraternities and sororities are there any tools that you use to try and differentiate your company?
6. You have been in business for a while now and thinking back at when you first started, would you recommend that a small up and coming business invest their resources in such web development tools?